

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058449

Luminaire Tested: S122RDR-H675D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1058449
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDR-H675D835-X4F0-XX-UDD-SVL-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

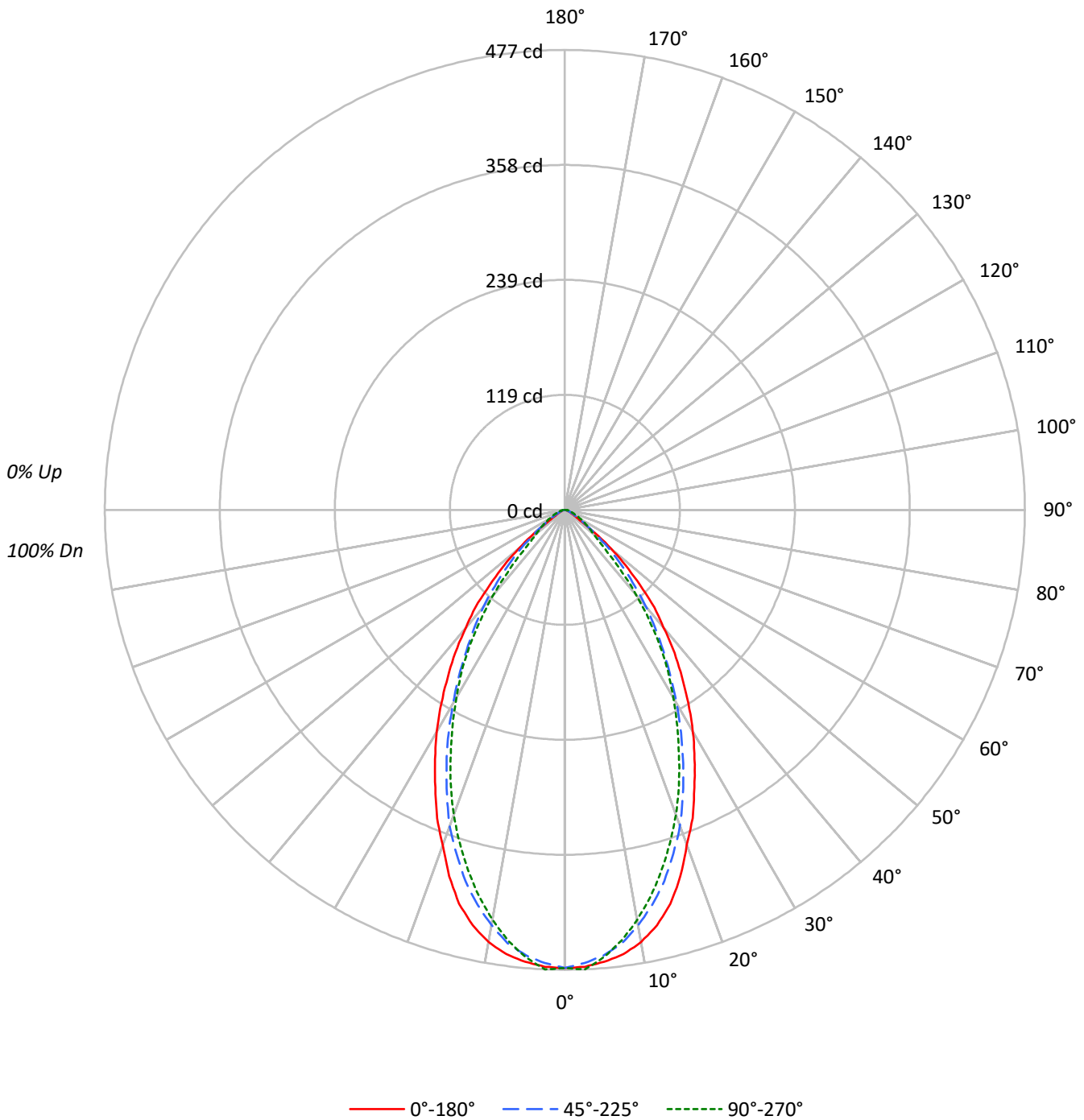
Lumens per Lamp: N/A
Luminaire Lumens: 511.1 lumens
Efficiency: N/A
Efficacy: 21.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92				
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84				
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	81	78	76				
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70				
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64				
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59				
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54				
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50				
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47				
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8769	8769	8769
5°	8715	8591	8626
10°	8531	8194	8087
15°	8083	7611	7393
20°	7264	6855	6612
25°	6470	5911	5697
30°	5659	4933	4790
35°	4764	3996	3868
40°	3840	3153	2787
45°	2871	2278	1660
50°	1797	1470	1088
55°	611	795	885
60°	351	491	701
65°	249	332	537
70°	205	254	410
75°	135	200	335
80°	96	202	298
85°	0	0	191

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2871 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.8	8.6
10°-20°	112.1	21.9
20°-30°	135.0	26.4
30°-40°	115.3	22.6
40°-50°	67.6	13.2
50°-60°	24.5	4.8
60°-70°	8.7	1.7
70°-80°	3.4	0.7
80°-90°	0.6	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	290.9	56.9
0°-40°	406.3	79.5
0°-60°	498.4	97.5
0°-90°	511.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	511.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	475	475	475	475	475	
5°	470	471	464	466	466	44
15°	423	416	398	391	387	117
25°	318	304	290	286	280	146
35°	212	195	177	176	172	132
45°	110	99	87	73	64	85
55°	19	27	25	26	28	24
65°	6	7	8	10	12	6
75°	2	3	3	4	5	2
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	475.2	475.2	475.2	475.2	475.2
2.5°	474.3	475.2	470.5	475.2	477.1
5°	470.5	471.4	463.8	465.7	465.7
7.5°	464.8	463.8	453.4	451.5	450.6
10°	455.3	452.5	437.3	434.4	431.6
12.5°	441.1	435.4	419.3	414.5	410.7
15°	423.1	416.4	398.4	390.8	387.0
17.5°	398.4	390.8	373.7	366.1	362.4
20°	369.9	362.4	349.1	340.5	336.7
22.5°	346.2	333.9	319.7	314.0	309.2
25°	317.8	304.5	290.3	285.5	279.8
27.5°	291.2	275.1	260.9	257.1	252.3
30°	265.6	248.5	231.5	231.5	224.8
32.5°	238.1	222.0	203.9	203.0	199.2
35°	211.5	195.4	177.4	175.5	171.7
37.5°	186.9	170.7	153.7	148.0	143.2
40°	159.4	145.1	130.9	121.4	115.7
42.5°	137.5	121.4	107.2	95.8	88.2
45°	110.0	98.7	87.3	73.0	63.6
47.5°	85.4	77.8	68.3	52.2	47.4
50°	62.6	58.8	51.2	38.9	37.9
52.5°	39.8	41.7	37.0	30.4	33.2
55°	19.0	26.6	24.7	25.6	27.5
57.5°	12.3	13.3	18.0	20.9	22.8
60°	9.5	9.5	13.3	17.1	19.0
62.5°	7.6	7.6	10.4	14.2	15.2
65°	5.7	6.6	7.6	10.4	12.3
67.5°	4.7	4.7	5.7	8.5	9.5
70°	3.8	3.8	4.7	6.6	7.6
72.5°	2.8	2.8	3.8	5.7	5.7
75°	1.9	2.8	2.8	3.8	4.7
77.5°	1.9	1.9	1.9	2.8	3.8
80°	0.9	0.9	1.9	1.9	2.8
82.5°	0.9	0.9	0.9	0.9	1.9
85°	0.0	0.0	0.0	0.9	0.9
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	3.43	4.60	3.80	4.91	5.22	6.83	8.00	7.20	8.31	8.62
	3H	3.95	4.97	4.33	5.30	5.67	7.56	8.58	7.94	8.91	9.28
	4H	4.08	5.02	4.48	5.38	5.76	7.77	8.72	8.18	9.07	9.46
	6H	4.15	5.01	4.56	5.39	5.78	7.92	8.79	8.34	9.16	9.56
	8H	4.15	4.96	4.58	5.36	5.76	7.95	8.77	8.38	9.16	9.57
	12H	4.11	4.89	4.54	5.27	5.71	7.95	8.73	8.38	9.11	9.54
4H	2H	3.74	4.69	4.15	5.04	5.43	6.80	7.75	7.21	8.10	8.49
	3H	4.39	5.16	4.81	5.57	5.97	7.67	8.44	8.09	8.84	9.25
	4H	4.63	5.31	5.06	5.73	6.18	7.95	8.63	8.39	9.05	9.50
	6H	4.74	5.33	5.21	5.78	6.25	8.17	8.76	8.64	9.20	9.68
	8H	4.75	5.29	5.22	5.74	6.22	8.21	8.76	8.69	9.21	9.68
	12H	4.71	5.19	5.20	5.68	6.15	8.23	8.71	8.72	9.19	9.67
8H	4H	4.73	5.28	5.20	5.73	6.20	7.88	8.42	8.35	8.87	9.35
	6H	4.89	5.33	5.40	5.83	6.32	8.13	8.57	8.64	9.07	9.56
	8H	4.92	5.32	5.45	5.84	6.33	8.19	8.59	8.72	9.11	9.60
	12H	4.90	5.25	5.42	5.74	6.32	8.24	8.59	8.76	9.09	9.66
12H	4H	4.72	5.19	5.21	5.68	6.16	7.83	8.31	8.32	8.79	9.27
	6H	4.89	5.28	5.41	5.80	6.30	8.08	8.48	8.61	9.00	9.49
	8H	4.95	5.30	5.47	5.79	6.37	8.16	8.51	8.68	9.01	9.58